

# **MAKING THE MOST OF WATER QUALITY MONITORING DATA: APPLICATIONS OF WATER QUALITY DATA ELEMENTS**

## **Moderator**

LeAnne Astin, ICPRB

## **Facilitators**

Herb Brass, USEPA

Jerry Diamond, Tetra Tech, Inc.

Charlie Peters, U.S. Geological Survey

## **Biographical Sketches**

LeAnne Astin is an aquatic ecologist with the Interstate Commission for the Potomac River Basin and Chair of the Biological Water Quality Data Elements Workgroup under the Methods and Data Comparability Board. She led the Board's development of data elements for biological assessment methods and endpoints.

Herb Brass is co-chair of the Methods and Data Comparability Board and Team Leader for Analytical Methods in EPA's Office of Ground Water and Drinking Water.

Jerry Diamond is a Director of Tetra Tech's Owings Mills, MD office and an EPA contractor to the Methods and Data Comparability Board where he helped formulate water quality data elements for biological and toxicological methods.

Charlie Peters is the District Chief in the Wisconsin District Office of USGS and has served as co-chair of the Methods and Data Comparability Board. He has been involved in a variety of water quality monitoring studies during the past 25 years and has authored over 40 reports describing the results of those studies.

## **Workshop Description**

The difference in water quality data terminology and definitions among monitoring programs has constrained the sharing and use of these data beyond the original monitoring projects. Collecting and storing data using common data elements and definitions increases the value and significance of water quality data. This approach allows the sharing of data with a known level of documentation and understanding, expanding the volume of potentially usable data. The Methods and Data Comparability Board and the National Water Quality Monitoring Council adopted a common set of data elements for chemical and microbiological analytes, providing the basis for elements addressing other kinds of data, including toxicological and bioassessment data, which will be presented and discussed in this workshop. These common data elements are being used in an increasing number of water quality monitoring programs and projects. Workshop participants will experience the value of using these data elements in their own projects and, through interactive break-out sessions using actual monitoring data and field forms, will learn about the modular organization of water quality data elements and how modules can be integrated and tailored to a particular program or user need. Specific attention will be given to evaluating the bioassessment data elements recently drafted by the Board and the Council, using information provided by participants and workshop facilitators. We are especially interested in obtaining feedback from participants on whether the toxicological and bioassessment data elements will help data users and data collectors make better use of these types of data. This workshop will demonstrate that the common data elements, when used by across the public and private sectors, will enhance any investment in water quality data gathering.